

C. Remarks

The claims are 1-82 and 84-102, with claims 1, 17, 33, 38, 60, 73 and 86 being independent. Claim 83 has been cancelled without prejudice. Claims 23, 25, 77, 79, 84 and 85 have been amended as to formal matters only. Applicants submit that no new matter has been added. Applicants respectfully request reconsideration of the pending claims.

The Examiner objected to claim 79 insofar as "to the second solution" should read --in the second solution--. Applicants have amended claim 79, as well as claims 23, 25 and 77, in accordance with the Examiner's suggestion. Accordingly, the objection should be withdrawn.

Claims 83 and 85 stand rejected under 35 U.S.C. §112, second paragraph. Applicants have cancelled claim 83 without prejudice and amended claim 85 to be dependent upon claim 73 as suggested by the Examiner. Accordingly, Applicants respectfully request withdrawal of the §112 rejection.

Claims 1-6, 13 and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by Gandhi (U.S. Patent No. 5,851,578). Claims 7-12 and 14-37 stand rejected under 35 U.S.C. §103(a) as being obvious over Gandhi. Claims 38-102 stand rejected under 35 U.S.C. §103(a) as being obvious over Gandhi in view of Braun (U.S. Patent No. 4,830,862) and Burkes (U.S. Patent No. 5,401,524). Applicants respectfully traverse these rejections.

The present invention is directed to artificially-sweetened, calcium-supplemented beverage concentrates, beverage compositions, and methods of making the same as variously set forth in the pending claims. The various embodiments of this

invention are characterized at least by one of two key features, namely, (1) the subsequent addition of artificial sweetener after the formation of a stable solution of calcium and any necessary acidic components or (2) a novel calcium source comprising calcium chloride and at least two calcium salts chosen from monocalcium phosphate, calcium hydroxide and calcium carbonate.

Applicants have discovered that a crucial aspect to forming a stable calcium-supplemented, acid-stabilized and palatable beverage composition is the timing of the addition of the artificial sweetener during the formulation process. In particular, if the artificial sweetener is added to a beverage concentrate prior to the formation of a stable solution of calcium and any required acids or acid-containing ingredients, the resulting solution will not be sweet, and the calcium salts may not fully dissolve into solution.

Gandhi does not recognize the importance of the timing of adding an artificial sweetener to a calcium-supplemented beverage formulation. In fact, the large majority of Gandhi's disclosure relates to sucrose-sweetened formulations and not to artificially-sweetened beverages. Gandhi's limited disclosure of one beverage formulation employing aspartame and acesulfame-K can hardly be viewed as a disclosure of the present inventive methods and compositions. Gandhi simply does not provide any guidance whatsoever in consistently achieving a palatable calcium-supplemented, artificially-sweetened beverage. What is more, Gandhi is chiefly concerned with the formulation of drinks containing large amounts of soluble fiber; the present invention requires no such ingredient.

Applicants have also developed a novel calcium source, namely a calcium source comprising calcium chloride and at least two calcium salts chosen from monocalcium phosphate, calcium hydroxide and calcium carbonate. Gandhi provides no

guidance in this regard. One of ordinary skill in the art would not be led to the inventive calcium source by Gandhi's disclosure of the potential use of other mineral salts. Clearly, Gandhi does not anticipate or render obvious the present invention.

Braun does not remedy the deficiencies of Gandhi. Instead Braun relates to the use of calcium sulfate, preferably in combination with calcium chloride, to improve the solubility of other calcium sources (mainly calcium hydroxide and calcium carbonate) in the presence of significant amounts of edible acids, such as phosphoric and citric acids. The calcium sulfate-chloride combination is said to reduce precipitation and deposition of calcium salts on equipment surfaces during pasteurization. Braun does not teach or suggest the importance of timing with respect to the addition of artificial sweeteners to a calcium-supplemented, acid-stabilized beverage. In addition, Braun requires calcium sulfate, while the novel calcium source of the present invention does not.

Similarly, Burkes does not remedy the deficiencies of Gandhi and Braun. Burkes relates to storage stable calcium fortified pre-mixes for beverage concentrate production. Sulfate is listed as one of several possible acidic anions. The pre-mixes also contain citric and malic acids and have a pH less than or equal to 3.5. Burkes is silent with regard to the timing of the addition of artificial sweeteners and provides no guidance as to the selection of salts used in the inventive calcium source.

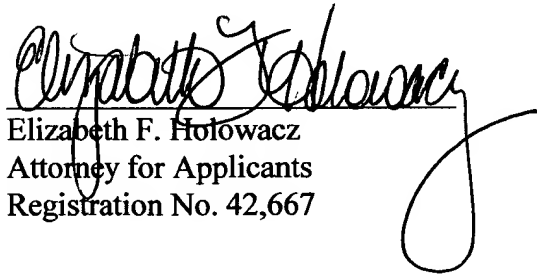
In sum, none of Gandhi, Braun and Burkes anticipates or renders obvious the present invention. The key features of the present invention, i.e., (1) the subsequent addition of artificial sweetener after the formation of a stable solution of calcium and any necessary acidic components or (2) a novel calcium source comprising calcium chloride and at least two calcium salts chosen from monocalcium phosphate, calcium hydroxide and

calcium carbonate, are not disclosed or suggested by any of the references, whether considered alone or in any combination. Accordingly, Applicants respectfully request withdrawal of the §102 and §103 rejections.

In view of the foregoing amendments and remarks, favorable reconsideration and passage to issue of the present case is respectfully requested. If, upon consideration of this paper, the Examiner believes there are any outstanding issues, it is respectfully requested that the Examiner contact the undersigned attorney in an effort to expeditiously resolve such issues.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,


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